# Operator Training

## Vapor Monitoring

D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health
and Environmental Control

# Release Detection

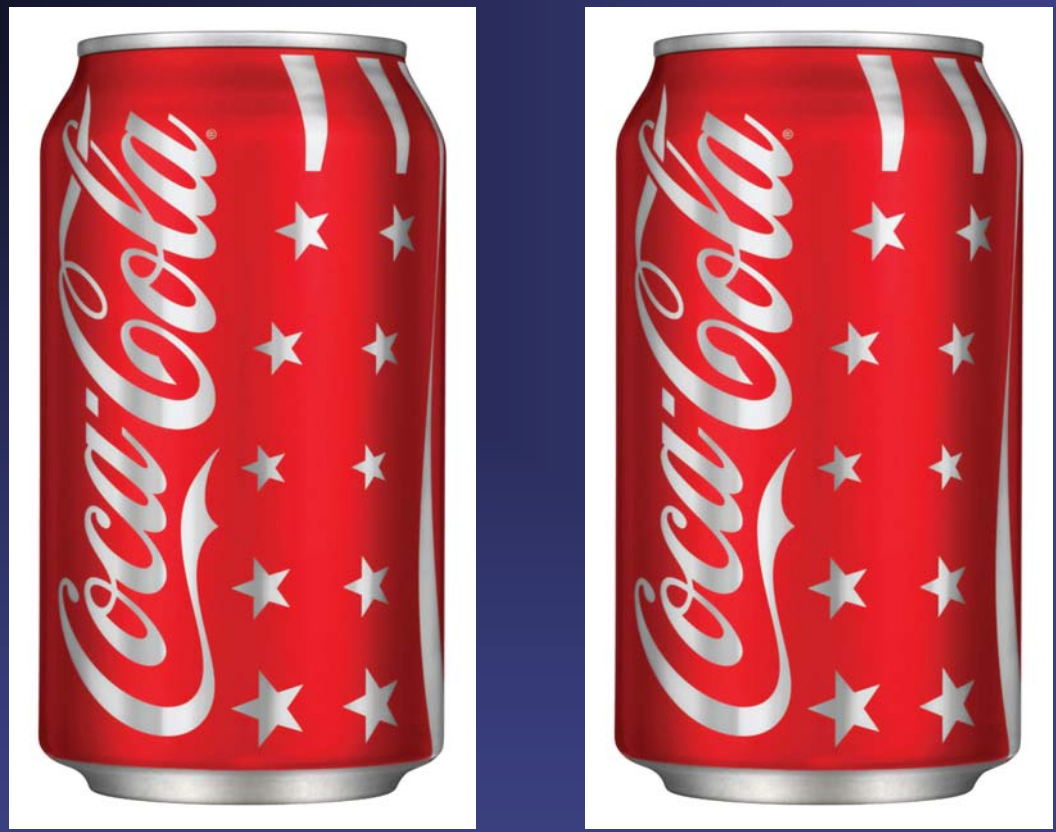
- Means watching the tank system on a routine basis so that if a release occurs, it will be discovered as quickly as possible
- All tanks are required to have release detection except tanks that serve as emergency generators

# Release Detection Requirement

Must use a method and/or equipment capable of finding a leak of 0.2 gallons per hour (gph) within 30 days

How much is 0.2 gallons per hour??

# Release Detection




A leak of 0.2 gallons per hour is the same as losing 2 cola cans worth of fuel in an hour

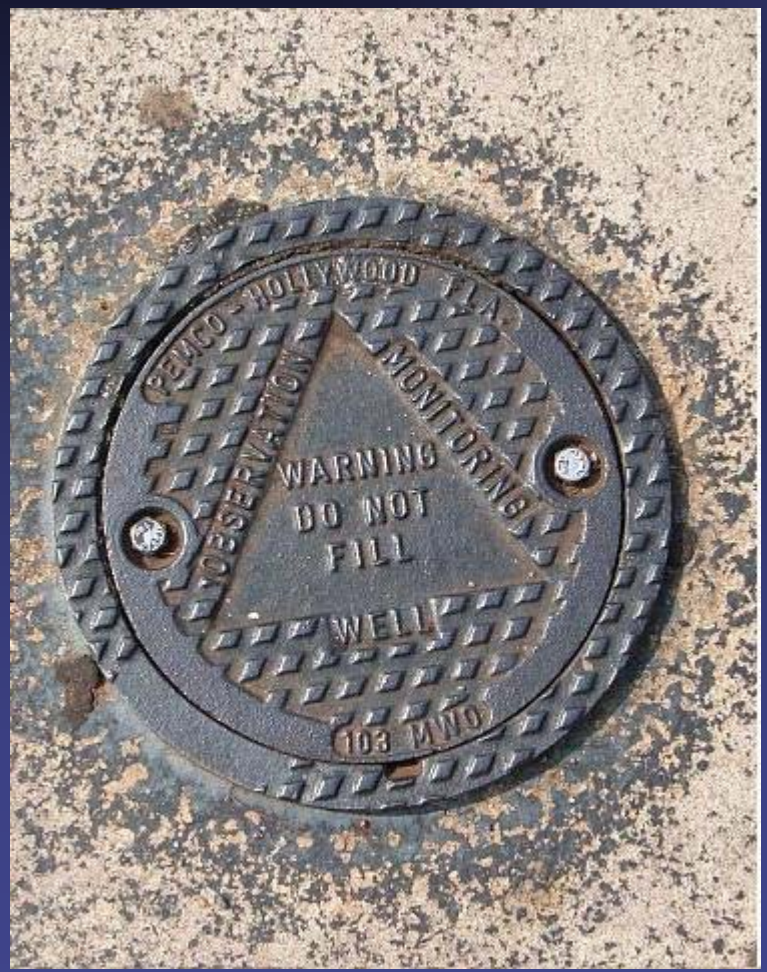
# Release Detection

Release detection requires that we look for a 0.2 gph leak at least once every month…

0.2 gph x 24 hours x 30 days =

144 gallons per month

# Vapor Monitoring




Vapor Monitoring uses equipment to detect the presence of fuel vapors in the soil of permanent monitoring wells installed surrounding the tank system.

# Vapor Monitoring

Fully automated vapor monitoring systems have equipment permanently installed in the monitoring wells to continuously or periodically gather and analyze vapor samples and respond with a visual and/or audible alarm.  Manually operated vapor monitoring systems range from equipment that immediately analyzes a gathered vapor sample to devices that gather samples to be sent to a laboratory for analysis.

# Vapor Monitoring

- Requires a site assessment before implementing
- Must measure for vapors once a month
- Will not work with substances that do not easily vaporize (diesel fuel)
- Backfill should be sufficiently porous to readily allow diffusion of vapors from releases into excavation area
- Groundwater cannot be too high to interfere with the flow of vapors

# Vapor Monitoring

- Monitoring must be done at least once a month
- At a minimum, a written log must be kept indicating monitoring results
- At a minimum, the most recent 12 months of monitoring records must be on file at all times